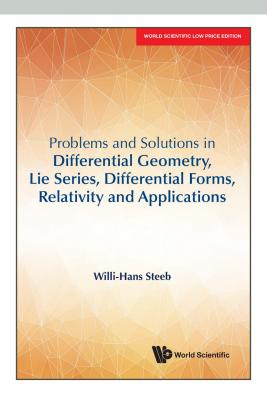




# PROBLEMS AND SOLUTIONS IN DIFFERENTIAL GEOMETRY, LIE SERIES, DIFFERENTIAL FORMS, RELATIVITY AND APPLICATIONS

By Willi-Hans Steeb (University of Johannesburg, South Africa)



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This volume presents a collection of problems and solutions in differential geometry with applications. Both introductory and advanced topics are introduced in an easy-to-digest manner, with the materials of the volume being self-contained. In particular, curves, surfaces, Riemannian and pseudo-Riemannian manifolds, Hodge duality operator, vector fields and Lie series, differential forms, matrix-valued differential forms, Maurer-Cartan form, and the Lie derivative are covered.

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